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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,750	07/23/2001	Charles M. Patton	10007237-1	4995

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HEWLETT-PACKARD COMPANY  
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EXAMINER

DAVIS, ZACHARY A

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/911,750	PATTON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Zachary A Davis	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 23 July 2001.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-46 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-46 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 23 July 2001 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20010723, 20030318</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. Applicant, specifically inventor Vora, has not given a post office address anywhere in the application papers as required by 37 CFR 1.33(a), which was in effect at the time of filing of the oath or declaration. A statement over applicant's signature providing a complete post office address is required.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 424 (see Figure 4), 524 (see Figure 5), 762', 764', 766', 768', 792', 794', 796', and 798' (see Figure 7).

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "456" has been used to designate both the generation of a steganographic object and the system including that generation in Figure 4.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet

submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

5. The disclosure is objected to because of the following informalities: The specification appears to contain minor errors.

For example, on page 12, lines 3-4 and 28-29, it appears that references to "Fig. 3" are intended to refer to "Fig. 3a"; on page 21, line 12, it appears that "processor 786" is intended to read "processor 796"; and on page 22, lines 7, 14, and 19, it appears that "valued content 100" is intended to read "valued content 200". Further, reference number 334' is used in the specification to refer to a public encryption key (page 14, line 1), public/private encryption keys (page 14, lines 9-10), and a private encryption key (page 14, line 16), which is generally unclear.

Appropriate correction is required. Applicant's cooperation is requested in correcting any other errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-21, 25, 26, and 31-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-15 are directed to digital content that is not tangibly embodied in a computer or computer readable medium. Further, the claims are directed to merely an arrangement of data, which is non-functional descriptive material and does not constitute statutory subject matter. See MPEP § 2106 IV.B.1(b).

Claims 16-20 are directed to digital content that is not tangibly embodied in a computer or computer readable medium. Further, the claims are directed to an arrangement of data, which is non-functional descriptive material and is therefore not statutory subject matter. The limitations “digital string embedding process” in Claims 16 and 20 and “digital string embedder” in Claim 18 could be directed to a software program, if specifically claimed as computer executable instructions or similar, which could constitute functional descriptive material. See MPEP § 2106 IV.B.1.

Claims 21, 25, 26, and 31-36 are directed to methods for protecting valued content. The language of the claims raises a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

8. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the statutory classes of invention.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
10. Claims 13, 14, 16-20, 22, 25, 28, and 35-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13, 14, and 28 each recite the limitation "said embedded digital file" in line 2 of each claim. There is insufficient antecedent basis for this limitation in the claims.

Claim 16 recites the limitation "said purchaser" in lines 6 and 8 of the claim. There is insufficient antecedent basis for this limitation in the claim, although there is reference to a purchaser system. Further, it is not clear what the subject of the limitation "is embedded" in line 6 is, which renders the claim indefinite. It is further assumed that "said encryption key, is conveyed" in lines 7-8 is intended to read "said encryption key is conveyed".

Claims 18 and 20 also recite the limitation “said purchaser” in line 5 and line 6, respectively. There is insufficient antecedent basis for this limitation in the claims, although the claims do refer to a purchaser system.

Claims 22 and 25 recite the limitation “said digital string” in line 2 of each claim. It is unclear whether this refers to the acquired digital string or the embedded digital string of Claim 21, which renders the claim indefinite.

Claim 35 recites the limitation “said purchaser system” in lines 2-3. There is insufficient antecedent basis for this limitation in the claim, although Claim 21 does refer to a purchaser.

Claim 36 recites the limitation “embedded encryption key” in line 5. It is unclear whether this is intended to read “said embedded encryption key” or “an embedded encryption key”. If it is intended as the former, then there is insufficient antecedent basis for such a limitation in the claim.

Claim 37 recites the limitation “a second digital file to be conveyed to said purchaser system as valued content system using said interface” in line 10. This is generally unclear, which renders the claim indefinite.

Claim 39 recites the limitation “said interface” in line 3; however, it is unclear whether this refers to the interface of Claim 37, or to the interface of line 2 of Claim 39. This renders the claim indefinite.

Claim 40 recites the limitation “said interface” in line 2; it is unclear whether this refers to the interface of Claim 37 or that of Claim 39. Further, the claim recites the

limitation “said purchaser system” in line 2; it is unclear whether this refers to the purchaser system of Claim 37 or that of Claim 39. This renders the claim indefinite.

Claim 43 recites the limitation “said interface” in line 4; it is unclear whether this is intended to refer to the interface of Claim 37, the interface recited in line 2 of Claim 43, or the sale interface recited in line 3 of Claim 43. This renders the claim indefinite. Further, it appears that the limitation “a network connection to said interface” in line 4 may be intended to read “a network connection coupled to said interface”.

Claim 44 recites the limitation “said provider system” in lines 2-3 and the limitation “said purchaser” in line 6. There is insufficient antecedent basis for these limitations in the claim, although there is reference to a purchaser processor. Further, in the limitation “an interface coupled to said purchaser processor and a provider system adapted to request a digital string from said purchaser processor, having a latent value at least to said purchaser” in lines 4-6, it is unclear whether the phrase beginning “adapted to” is intended to modify the “interface” or the “provider system”. In the same limitation, it is unclear whether the phrase beginning “having a latent value” is intended to modify the “interface”, the “provider system”, the “digital string”, or the “purchaser processor”. These limitations render the claim indefinite.

Any claim not specifically referred to above is rejected due to its dependence on a rejected base claim.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-15, 21-35, and 37-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Wiser et al, US Patent 6385596.

In reference to Claim 1, Wiser discloses valued content including a digital file (column 6, lines 48-52) and a digital string embedded in the file (column 8, lines 53-56).

In reference to Claims 2 and 3, Wiser further discloses that the string is encrypted (column 9, lines 19-20).

In reference to Claim 4, Wiser further discloses the string being embedded in a human perceptible form (column 9, lines 16-18).

In reference to Claim 5, Wiser further discloses a digital watermark (column 7, lines 5-6 and 17-26).

In reference to Claims 6-9, Wiser further discloses that the file can include text, images (column 6, lines 59-60), and audio (column 6, lines 48-52; column 7, lines 4-9).

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In reference to Claim 10, Wiser further discloses that the latent value of the string resides in information that would place the purchaser at increased financial risk if known by another (column 8, lines 53-56).

In reference to Claims 11 and 12, Wiser further discloses a provider string that can be encrypted (see column 4, lines 1-4; column 7, lines 27-46; see also column 10, line 60-column 11, line 7).

In reference to Claims 13 and 14, Wiser further discloses recording the file on a portable medium (see column 9, line 53-column 10, line 16).

In reference to Claim 15, Wiser discloses valued content including a digital file (column 6, lines 48-52), a digital string embedded in the file (column 8, lines 53-56), and an encrypted provider digital string (see column 4, lines 1-4; column 7, lines 27-46).

In reference to Claim 21, Wiser discloses a method including acquiring a digital string, embedding the string in a digital file (column 8, lines 53-56), and conveying the file to a purchaser (column 9, lines 54-56).

In reference to Claims 22-24, Wiser further discloses encrypting the digital string (column 9, lines 19-20).

In reference to Claim 25, Wiser further discloses generating a digital watermark (column 7, lines 5-6 and 17-26).

In reference to Claims 26 and 27, Wiser further discloses a provider string that can be encrypted (see column 4, lines 1-4; column 7, lines 27-46; see also column 10, line 60-column 11, line 7).

In reference to Claim 28, Wiser further discloses recording the file on a portable medium (column 9, line 53-column 10, line 16).

In reference to Claims 29 and 30, Wiser further discloses transmitting the content via a network (column 5, lines 43-46).

In reference to Claims 31-33, Wiser further discloses that the string can be embedded in images (column 6, lines 59-60) or audio (column 6, lines 48-52; column 7, lines 4-9).

In reference to Claim 34, Wiser further discloses that the latent value of the string resides in information that would place the purchaser at increased financial risk if known by another (column 8, lines 53-56).

In reference to Claim 35, Wiser further discloses determining the content of the string (column 9, lines 11-24).

In reference to Claim 37, Wiser discloses a system including a processor (see, for example, Figure 1, Client System 126; see also column 9, lines 40-52), a storage device (for example, see column 10, lines 50-55), an interface, and content including a digital file (column 6, lines 48-52) and a string embedded in the file (column 8, lines 53-56).

In reference to Claim 38, Wiser further discloses an output device (column 10, lines 1-16).

In reference to Claims 39 and 40, Wiser further discloses a connection to a network (column 5, lines 43-46).

In reference to Claim 41, Wiser further discloses determining the content of the string (column 9, lines 11-24).

In reference to Claims 42 and 43, Wiser further discloses a point of sale machine and a network connection (see column 11, lines 8-13).

In reference to Claim 44, Wiser discloses a system including a processor (column 9, lines 40-52), an interface that requests a digital string (column 8, lines 53-56), and a storage device (for example, column 10, lines 50-55).

In reference to Claims 45 and 46, Wiser further discloses a network (column 5, lines 43-46).

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 16-20 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Dwork et al, US Patent 6038316.

In reference to Claims 16-19, Dwork discloses valued content including an encrypted digital file, an encryption key (column 7, lines 34-37, where content is encrypted with a key K), and a digital string embedded in the encryption key (see column 7, lines 14-19, where  $n_i$  is used to produce the key).

In reference to Claim 20, Dwork discloses valued content including an encrypted digital file (column 7, lines 34-37), and an authorization file including an encryption key, a digital string embedded in the encryption key (column 7, lines 14-19, where string  $n_i$  is used to produce the key K), and a process that conveys the file to a purchaser system (column 7, lines 38-40), decrypts the encrypted file (column 7, lines 66-67), and embeds the string (column 7, lines 14-19).

In reference to Claim 36, Dwork discloses acquiring a digital string (column 7, lines 40-47), embedding the string in an encryption key (column 7, lines 14-19), and conveying an encrypted file to a purchaser (column 7, lines 38-40).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ZAD  
zad

*Andrew Caldwell*  
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